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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,308	03/22/2004	Yoshinori Tsueda	016907-1646	9149
22428	7590	07/27/2005	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			REIS, TRAVIS M	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/805,308

Applicant(s)

TSUEDA ET AL.

Examiner

Travis M. Reis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20050113.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 1, 136, & 196.
Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 172 & 192.
Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

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basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 5, 11, 12, & 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Sakagami (U.S. Patent 6882807).

Sakagami discloses a heat generator (201) for use in a heating apparatus comprising a central aluminum shaft (211) (col. 1 line 30), which does not generate heat when a magnetic field is supplied thereto by being nonmagnetic, a protective heat transfer reinforcing material covering the circumference of the central shaft comprising an elastic body (212) formed to be a predetermined thickness at a circumference of the central shaft, a conductor layer (213) formed to be a predetermined thickness at a circumference of the elastic body; and a second elastic body (214) formed to be a predetermined thickness at a circumference of the conductor layer (Figure 9B), wherein the heat generator is elastically deformed at a position which contacts a member (202) to be contacted with the second elastic body at a predetermined pressure (207), and can supply heat and pressure to a medium (205) to be supplied between the second elastic body and the member to be contacted, and an image developing agent (204) carried by the medium; and magnetic field generators (206) being provided along the longitudinal direction of the central shaft (Figure 15).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 4, 6-10, 13, 14, 18, & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakagami.

Sakagami discloses all of the instant claimed invention as stated above in the rejection of claims 1, 2, 5, 11, 12, & 15-17, including, in a second embodiment, a ferric alloy core (col. 1 line 30).

Sakagami does not disclose the core has a resistivity of 10^6 ($\Omega \cdot m$), a Curie temperature of $180^{\circ}C$, or a relative permeability of 200, satisfying $\mu \leq 2.81 \times 10^9 \rho$. However, to choose a resistivity of 10^6 ($\Omega \cdot m$), a Curie temperature of $180^{\circ}C$, or a relative permeability of 200, satisfying $\mu \leq 2.81 \times 10^9 \rho$, absent any criticality, is only considered to be the " optimum " values of the central shaft, as stated above, that a person having ordinary skill in the art would have been able to determine using routine experimentation based, among other things, on the desired accuracy and since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. See *In re Boesch*, 205 USPQ 215 (CCPA 1980). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to use a central shaft with the properties of resistivity of 10^6 ($\Omega \cdot m$), Curie temperature of $180^{\circ}C$, and relative permeability of 200, satisfying $\mu \leq 2.81 \times 10^9 \rho$ in order to have a central shaft that would be long lasting under thermal and magnetic stress.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gregory discloses a fuser roll assembly (U.S. Patent 3751216). Lenk et al. discloses an inductively heatable godet with insulating means (U.S. Patent 4180717). Oda et al. discloses an image fixing device for image forming including means for locally heating inner wall of fixing means at location corresponding to nip (U.S. Patent 5303016). Kuuno et al. discloses an image

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fixing device, image forming apparatus providing the image fixing device and rotor used in the image fixing device and having induction coil inside (U.S. Patent 5832354). Terada et al. discloses an image heating device and image forming device using same (U.S. Patent 6021303). Ito et al. discloses an apparatus for controlling the rotational motion of a fixing apparatus (U.S. Patent 6035174). Okabayashi et al. discloses an apparatus and method for detecting a condition in an inductive heating device (U.S. Patent 6037576). Watanabe discloses a fixing member fixing apparatus and electrophotographic apparatus using them (U.S. Patent 6055403). Genji et al. discloses a heating roller device (U.S. Patent 6069347). Samei discloses a fixing device (U.S. Patent App. Pub. 20020048472). Omoto et al. discloses a fixing device and image forming apparatus equipped therewith (U.S. Patent App. Pub. 20020098020). Imai et al. discloses an image heating and image forming device (U.S. Patent 20020190060). Maeda et al. discloses a heating apparatus and image forming apparatus incorporating the same (U.S. Patent 20030113143). Shimizu et al. discloses an image forming apparatus and heat generating rotary member for use in the same (U.S. Patent App. Pub. 20030147679). Katakabe et al. discloses an electromagnetic induced heating roller, heating apparatus, and image forming apparatus (U.S. Patent App. Pub. 20040169036). Hartley et al. discloses an external radiant heater for fuser members and method of making same (U.S. Patent 6442366).

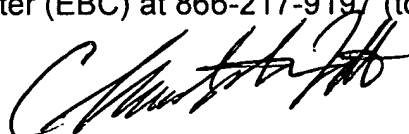
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M. Reis whose telephone number is (571) 272-2249. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Travis M Reis
Examiner
Art Unit 2859



Diego Gutierrez
Supervisory Patent Examiner
Tech Center 2800

tmr
7/22/05

CHRISTOPHER W. FULTON
PRIMARY EXAMINER